



DOCKET NO.: 218335US0CONT

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#11 (Response)  
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"RESPONSE UNDER 37 CFR 1.116-  
EXPEDITED PROCEDURE EXAMINING  
GROUP 1756"

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

RECEIVED  
APR 18 2003  
TC 1700

IN RE APPLICATION OF :  
SHINICHI KAWAMURA, ET AL. : EXAMINER: RODEE, C. D.  
SERIAL NO: 10/051,230 :  
FILED: JANUARY 22, 2002 : GROUP ART UNIT: 1756  
FOR: AROMATIC POLYCARBONATE :  
RESIN, ELECTROPHOTOGRAPHIC  
PHOTOCONDUCTOR, PROCESS  
CARTRIDGE, AND  
ELECTROPHOTOGRAPHIC IMAGE  
FORMING METHOD AND  
APPARATUS

CONSIDERED  
CM  
5/1/03

REQUEST FOR RECONSIDERATION

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

In response to the Official Action of December 12, 2002, Applicants respectfully request reconsideration of the above-identified application in view of the following remarks, and the Declaration filed herewith.

REMARKS

Applicants would like to thank Examiner RoDee for the helpful and courteous interview with Applicants' representative on February 14, 2003. During the discussion, the Examiner suggested (see Interview Summary) comparing polycarbonate resins of the claimed invention, having varying amounts of structural units of formula (2) within the claimed range, with the "bisphenol A" polycarbonates of Ikuno and Nagai.

The rejections of the claims under 35 U.S.C. § 103(a) over the combination of Ikuno and Tanaka, or Nagai are respectfully traversed, in view of the comparative

data provided in the Declaration under 37 C.F.R. § 1.132 filed herewith. The Declaration shows that polycarbonates according to the claimed invention, having amounts of units of formula (2) ranging from 13.1 to 79.4 mole%, have significantly improved abrasion resistance compared to closest prior art polycarbonate – i.e., the “bisphenol A” polycarbonate of Example 3 of Nagai.

As discussed in the response filed November 13, 2002, and as admitted by the Examiner (outstanding Official Action at page 3, paragraph 4) none of the applied references describe an electrophotographic photoconductor having the particular polycarbonate resin with structural units of formula (2) of the claimed invention. Each of the applied references indicates that “bisphenol A” polycarbonates are suitable polycarbonates for electrophotographic photoconductors.

The comparative data at Table 2, page 105 of the present specification shows that electrophotographic photoconductors comprising the polycarbonate resin of formula (2) of the claimed invention, have significantly improved abrasion resistance compared to electrophotographic photoconductors, comprising a “bisphenol A” polycarbonate. However, the Examiner indicated that this comparative data was “not commensurate in scope with the claims” (outstanding Official Action at page 4, lines 15-16). Accordingly, Applicants have filed herewith a Declaration providing an additional comparison between the “bisphenol A” polycarbonate of Example 3 of Nagai with polycarbonate resins according to the present invention, having the same charge transport component, and having structural units of formula (2) ranging from 13.1 mole% (polycarbonate resin (5)) to 79.4 mole% (polycarbonate resin (4)).

The table at page 6 of the Declaration, shows that photoconductors comprising polycarbonates according to the claimed invention (i.e., Examples 1-5) have essentially the same  $V_m$ ,  $V_0$ , and  $E_{1/2}$  values as a photoconductor comprising the polycarbonate of Example 3 of Nagai, but all of the claimed polycarbonates have

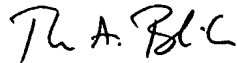
substantially improved abrasion resistance, as demonstrated by abrasion values which are only 1-16% of the abrasion values of the polycarbonate of Nagai. Thus, the polycarbonates of the claimed invention provide substantially improved abrasion resistance, over a wide compositional range, compared to the most similar “bisphenol A” polycarbonate of the prior art (i.e., Example 3 of Nagai). Applicants respectfully submit that one of skill in the art of electrophotographic photoconductors would reasonably conclude that the polycarbonates of the claimed invention, having 5 wt% or more of the structural units of formula (2), have significantly improved abrasion resistance compared to the “bisphenol A” polycarbonate of Nagai. Thus, none of the applied references, either individually or in combination, suggest the claimed invention. Accordingly, Applicants respectfully request withdrawal of the rejections.

Applicants would like to thank the Examiner for his indication during the interview of February 14, 2003, that the rejection under 35 U.S.C. § 112, second paragraph is withdrawn in view of the description in the specification of the term “quenching unit” (i.e., as a device for removing residual potential from the surface of an imaging member, for example, as discussed at page 19 of the present specification).

Accordingly, in view of the arguments presented above, and the Declaration filed herewith, Applicants respectfully submit that the present application is now in condition for allowance. Early notification thereof is earnestly solicited.

Respectfully submitted,

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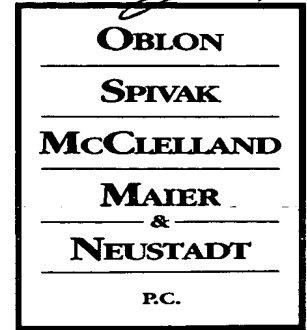
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EXPEDITED PROCEDURE EXAMINING  
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Docket No.: 218335US0CONT

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

RE: Application Serial No.: 10/051,230

Applicants: SHINICHI KAWAMURA, ET AL.

Filing Date: January 22, 2002

For: AROMATIC POLYCARBONATE RESIN,  
ELECTROPHOTOGRAPHIC PHOTOCONDUCTOR,  
PROCESS CARTRIDGE, AND  
ELECTROPHOTOGRAPHIC IMAGE FORMING  
METHOD AND APPARATUS

Group Art Unit: 1756

Examiner: RoDee, Christopher D.

SIR:

Attached hereto for filing are the following papers:

**Request for Reconsideration, Declaration under 37 C.F.R. §1.132 (executed 6, pp.), Request for Extension of Time (1- month)**

Our check in the amount of \$110.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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